## CLAIMS

1. A method of correcting the shape of a green tire, said method comprising the steps of:

placing the green tire on a green tire support table provided with a lower tire bead correcting unit at a predetermined position in horizontal attitude so as to surround the lower tire bead correcting unit;

engaging a plurality of radially movable pressing members included in the lower tire bead correcting unit and arranged on a circle coaxial with the lower tire bead correcting unit with a lower tire bead of the green tire placed on the green tire support table;

inserting an upper tire bead correcting unit inside an upper tire bead of the green tire placed on the green tire support table;

engaging a plurality of radially movable pressing members included in the upper tire bead correcting unit and arranged on a circle coaxial with the upper tire bead correcting unit with the upper tire bead of the green tire placed on the green tire support table;

moving the plurality of pressing members included in the lower tire bead correcting unit radially outward to shape the lower tire bead into a completely round shape of a predetermined diameter;

moving the plurality of pressing members included in the

upper tire bead correcting unit radially outward to shape the upper tire bead into a completely round shape of a predetermined diameter; and

vertically moving at least either of the lower and the upper tire bead correcting unit relative to the other to adjust an axial distance between the upper and the lower tire bead to a predetermined axial bead spacing.

2. The method according to claim 1, wherein the upper tire bead correcting unit is placed inside the green tire placed on the green tire support table by turning and vertically moving the upper tire bead correcting unit.

3. An apparatus for correcting the shape of a green tire, comprising:

a green tire support table for supporting a green tire thereon in horizontal attitude;

a lower tire bead correcting unit including a plurality of radially movable first pressing members placed on the green tire support table on a circle coaxial with the green tire support table and a first pressing member moving means for pressing a lower tire bead of the green tire radially outward by moving the first pressing members radially outward to shape the lower tire bead in a completely round shape of a predetermined diameter;

an upper tire bead correcting unit including a plurality of radially movable second pressing members arranged on a

circle and a second pressing member moving means for pressing an upper tire bead of the green tire placed on the green tire support table radially outward by moving the second pressing members radially outward to shape the upper tire bead in a completely round shape of a predetermined diameter; and

lifting means for vertically moving at least either of the lower and the upper tire bead correcting unit relative to the other to adjust an axial distance between the upper and the lower tire bead to a predetermined axial bead spacing.

4. The apparatus according to claim 3, wherein the first pressing member moving means includes a plurality of sliding members respectively holding the first pressing members at radially outer ends thereof for sliding in radial directions, and a driving means for moving the sliding members radially outward and inward such that all the pressing members are always on one and the same circle.

5. The apparatus according to claim 4, wherein the sliding members are sliding bars extended in radial directions, respectively.

6. The apparatus according to claim 4, wherein the driving means for moving the sliding members radially includes projections formed respectively on the sliding members; a cam disk provided with spiral slots in which the projections on the sliding members are engaged, respectively, and supported for turning about the center axis of the lower tire bead

correcting unit; and an actuator for turning the cam disk.

7. The apparatus according to claim 3, wherein the second pressing member moving means includes a plurality of segments respectively holding the second pressing members at radially outer ends thereof for moving in radial directions, and a driving means for moving the segments radially outward and inward such that the pressing members are always on one and the same circle.

8. The apparatus according to claim 7, wherein the segments are cylindrical segments formed by dividing a cylinder along radial planes arranged at equal angular intervals about an axis of the cylinder.

9. The apparatus according to claim 7, wherein the upper tire bead correcting means includes an upper disk and a lower disk parallel to the upper disk; the driving means for radially moving the segments includes the upper disk, an annular member put on the upper disk so as to surround the upper disk for turning movement about the upper disk; the driving means for radially moving the segments includes bent levers each disposed so as to extend along a lower surface of the upper disk, having a bend, an outer arm extending from the bend and provided with a slot in a free end part thereof and an inner arm extending from the bend at an angle to the outer arm, and pivotally supported on the upper disk by its bend, first pins attached to the upper disk and engaged in the slots of the outer

arms of the bent levers, respectively, and second pins attached to the segments and engaged in the slots of the inner arms of the bent levers, respectively.

10. The apparatus according to claim 9, wherein guide members for guiding the segments for radial movement are fixed to the lower disk.

11. The apparatus according to claim 4, wherein the driving means for moving the sliding members in radial directions includes a stretchable tubular structure set upright on the green tire support table in alignment with a vertical center axis of the green tire support table, and links each having one end connected to the stretchable tubular structure and the other end connected to the sliding member for radially moving the sliding members according to variation of axial size of the stretchable tubular structure.

12. The apparatus according to claim 1, wherein the lifting means for correcting the axial distance between the upper and the lower tire bead includes a vertically stretchable, rotary shaft disposed adjacent to the green tire support table, and a swing bar horizontally extending from the rotary shaft and holding the upper tire bead correcting unit on a free end part thereof.